

Appl. No. 10/064,595  
Amdt. dated August 1, 2006  
Reply to Office action of May 19, 2006

**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application:

**Listing of Claims:**

1. (currently amended) A method for controlling a network connection of the terminal in  
5 a wireless network system, the terminal capable of wirelessly transmitting and  
receiving data, the wireless network system comprising a plurality of wireless  
networks, the different wireless networks having different identities capable of being  
transmitted wirelessly by each wireless network, the terminal comprising:  
10 a plurality of distinct sorting pointers, each distinct sorting pointer  
representing a unique priority;  
a network database for recording a plurality of predetermined identities,  
wherein the network database has a plurality of key IDs  
stored in the database with each of key IDs corresponding to a  
predetermined identity;  
15 a plurality of configuration tables, each configuration table for corresponding  
one predetermined identity to one unique sorting pointer, and each  
configuration table having at least a unique predetermined identity which  
corresponds to a sorting pointer; and  
a status pointer for representing an operational location and time;  
20 the method comprising:  
receiving identities of the plurality of wireless networks via wireless  
transmission;  
choosing a configuration table from the plurality of configuration tables  
according to the status pointer;  
25 comparing the predetermined identity of the chosen configuration table with  
the identities received, and if any of the plurality of identities received  
matches the predetermined identity, then choosing an identity according

Appl. No. 10/064,595  
Amdt. dated August 1, 2006  
Reply to Office action of May 19, 2006

to the sorting pointer corresponding to the status pointer; and  
wirelessly connecting to the wireless network corresponding to the chosen  
identity, wherein a certification program is first processed, then  
the data being uploaded or downloaded between the terminal  
5 and the wireless network is encrypted according to the key ID  
which is corresponding to the wireless identity, and data being  
uploaded or downloaded between the terminal and the  
wireless network is encrypted according to the key ID  
corresponding to the network identity.

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2. (original) The method of claim 1 wherein when choosing an identity according to the  
matched sorting pointer corresponding to the predetermined identity, the  
predetermined identities matching the chosen identity have sorting pointers with  
higher priorities.

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3-4. (cancelled).

5. (original) The method of claim 1 wherein each wireless network has at least an access  
point, and the identity of each wireless network is transmitted by the access point of  
20 each wireless network.

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6. (original) The method of claim 1 wherein the terminal is a notebook computer.

7. (cancelled).

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8. (original) The method of claim 1 wherein each of the wireless networks is capable of  
continuously sending out a beacon signal comprising a corresponding identity of the  
wireless network, and the terminal is capable of receiving the plurality of identities

Appl. No. 10/064,595  
Amdt. dated August 1, 2006  
Reply to Office action of May 19, 2006

corresponding to the wireless networks.

9. (original) The method of claim 1 further comprising:

5 choosing an identity via a predetermined method when comparing the  
predetermined identities of the chosen configuration table to the  
identities received from the terminal results in no received identities  
being identical to any of the predetermined identities.

10 10. (original) The method of claim 9 wherein the predetermined method chooses an  
identity randomly.

11. (original) The method of claim 9 further comprising:

15 wirelessly connecting to the wireless network which is corresponding to the  
chosen identity; and  
updating the chosen configuration table according to the chosen identity.

12. (original) The method of claim 11 further comprising:

updating all configuration tables according to the chosen identities.

20 13. (previously presented) The method of claim 1 wherein each configuration table  
corresponds to a unique list of prioritized user preferences for a specific operational  
time and physical location of the terminal.

25 14. (new) A method for controlling a network connection of the terminal in a wireless  
network system, the terminal capable of wirelessly transmitting and receiving data,  
the wireless network system comprising a plurality of wireless networks, the  
different wireless networks having different identities capable of being transmitted  
wirelessly by each wireless network, and the plurality of wireless networks being

Appl. No. 10/064,595  
Amdt. dated August 1, 2006  
Reply to Office action of May 19, 2006

capable of responding to a probe signal by wirelessly transmitting the identity corresponding to the wireless network, the terminal comprising:

- a plurality of distinct sorting pointers, each distinct sorting pointer representing a unique priority;
  - 5 a network database for recording a plurality of predetermined identities;
  - a plurality of configuration tables, each configuration table for corresponding one predetermined identity to one unique sorting pointer, and each configuration table having at least a unique predetermined identity which corresponds to a sorting pointer; and
  - 10 a status pointer for representing an operational location and time;
- the method comprising:
- sending out a probe signal through the terminal;
  - having the plurality of wireless networks respond to their own corresponding identities via wireless transmission to make
  - 15 the terminal capable of receiving the identities corresponding to the plurality of wireless networks;
  - choosing a configuration table from the plurality of configuration tables according to the status pointer;
  - comparing the predetermined identity of the chosen configuration table with
  - 20 the identities received, and if any of the plurality of identities received matches the predetermined identity, then choosing an identity according to the sorting pointer corresponding to the status pointer; and
  - wirelessly connecting to the wireless network corresponding to the chosen identity.

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15. (new) The method of claim 14 wherein when choosing an identity according to the matched sorting pointer corresponding to the predetermined identity, the predetermined identities matching the chosen identity have sorting pointers with

Appl. No. 10/064,595  
Amdt. dated August 1, 2006  
Reply to Office action of May 19, 2006

higher priorities.

16. (new) The method of claim 14 wherein each wireless network has at least an access point, and the identity of each wireless network is transmitted by the access point of  
5 each wireless network.

17. (new) The method of claim 14 wherein the terminal is a notebook computer.

18. (new) The method of claim 14 wherein each of the wireless networks is capable of  
10 continuously sending out a beacon signal comprising a corresponding identity of the wireless network, and the terminal is capable of receiving the plurality of identities corresponding to the wireless networks.

19. (new) The method of claim 14 further comprising:  
15 choosing an identity via a predetermined method when comparing the predetermined identities of the chosen configuration table to the identities received from the terminal results in no received identities being identical to any of the predetermined identities.

20. (new) The method of claim 19 wherein the predetermined method chooses an identity  
20 randomly.

21. (new) The method of claim 19 further comprising:  
25 wirelessly connecting to the wireless network which is corresponding to the chosen identity; and  
updating the chosen configuration table according to the chosen identity.

22. (new) The method of claim 21 further comprising:

Appl. No. 10/064,595  
Amdt. dated August 1, 2006  
Reply to Office action of May 19, 2006

updating all configuration tables according to the chosen identities.

23. (new) The method of claim 14 wherein each configuration table corresponds to a  
unique list of prioritized user preferences for a specific operational time and  
5 physical location of the terminal.